REMARKS

Consideration and entry of this paper, and reconsideration and withdrawal of the rejections of the pending claims are respectfully requested in view of the amendments and remarks herein, which place the application in condition for allowance, or in better condition for appeal.

I. STATUS OF CLAIMS AND FORMAL MATTERS

Claims 1-63 are pending in this application. Claims 3-5, 8, 9, 11-13, 15, 16 and 18-63 are withdrawn from further consideration.

No new matter has been added.

Applicants thank the Examiner for withdrawing the rejections of the claims under 35 U.S.C. § 103(a) as being obvious over Cleverly *et al.*

It is submitted that the claims, herewith and as originally presented, are patentably distinct over the prior art cited in the Office Action, and that these claims were in full compliance with the requirements of 35 U.S.C. § 112. It is submitted that the amendments of the claims, as presented herein, are not made for purposes of patentability within the meaning of 35 U.S.C. §§ 101, 102, 103 or 112. Rather, these amendments and additions are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

The issues raised by the Examiner in the Office Action are addressed below in the order they appear in the prior Action.

II. THE REJECTIONS UNDER 35 U.S.C. §103 ARE OVERCOME

Claims 1, 2, 6, 7, 10, 14, and 17 remain rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Meinke *et al.* (WO 9629073) and Baker (EP 249409). Applicants respectfully traverse the rejection.

The cited references do not render the pending claims obvious.

The Examiner asserts that Meinke teaches an ectoparasitic formulation comprising the elected t-butyl nodulisporamide and the liquid carriers such as propylene glycol, and that the formulation can be a spot-on formulation. The Examiner contends that whether the formulation is a spot-on or an oral formulation does not matter since a statement of intended use in a claim to a formulation does not carry patentable significance.

The Examiner further alleges that Baker teaches pour-on/spot-on formulation for animals comprising water insoluble ectoparasiticides for controlling parasites, which can comprise fixed oil, which is a triglyceride or a fatty acid, dipropylene glycol monoethyl ether for the purpose of spreading the ectoparasiticide onto the target, and polyvinylpyrrolidone and/or polyvinylalcohol for the purpose of adhering to the ectoparasiticide onto the target. The Examiner also states that Baker teaches that polyoxyethylated sorbitan monooleate can be added to the pour-on formulation.

The Examiner concludes that it would have been obvious to add composition by Meinke *et al.* to Baker's pour-on formulation comprising dipropylene glycol monoethyl ether, polyoxyethylated sorbitan monooleate and polyvinylpyrrolidone or polyvinylalcohol.

The Examiner is respectfully directed to the case law, namely, that there must be some prior art teaching which would have provided the necessary incentive or motivation for modifying the reference teachings. *In re Laskowski*, 12 U.S.P.Q. 2d 1397, 1399 (Fed. Cir. 1989); *In re Obukowitz*, 27 U.S.P.Q. 2d 1063 (BOPAI 1993). Although a teaching, suggestion, or motivation to combine is no longer rigidly required for a finding of obviousness, it remains the primary guarantor against a non-statutory hindsight analysis. *Ortho-McNeil Pharm., Inc. v. Mylan Labs., Inc.*, 520 F.3d 1358, 1365 (Fed. Cir. 2008). Further, as stated by the Court in *In re Fritch*, 23 U.S.P.Q. 2d 1780, 1783-1784 (Fed. Cir. 1992): "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggests the desirability of the modification." The requirement that for the §103 rejection to be proper, both the suggestion of the claimed invention and the expectation of success must be founded in the prior art, and not Applicant's disclosure. *In re Dow*, 5 U.S.P.Q.2d 1529, 1531 (Fed.Cir. 1988).

Furthermore, The Supreme Court has recently reaffirmed the factors set out in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18: "[T]he scope and content of the prior art are determined; differences between the prior art and the claims at issue are...ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented." *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727.

Applicants respectfully submit that, Meinke *et al.* mention spot-on formulations only generally as a possible way of applying the active compounds to humans and animals to control internal or external parasites (page 34, line 15-21) but does not specify any compositions and any required ingredients and their proportions in such formulations. Meinke *et al.* do not teach or suggest a crystallization inhibitor system. In addition to the arguments of record with respect to this reference, Meinke *et al.* do not relate to the solvents and cosolvents of the claimed formulations as well as specific amounts of the claimed ingredients. Based on the teachings of Meinke *et al.*, one skilled in the art would not be able to derive the spot-on formulations of the pending claims as amended.

Contrary to the Examiner's assertions, it would not have been obvious to one skilled in the art to add composition by Meinke *et al.* to Baker's pour-on formulation allegedly comprising dipropylene glycol monomethyl ether, polyoxyethylated sorbitan monooleate and polyvinylpyrrolidone or polyvinylalcohol.

Firstly, Applicants would like to point out that Baker describes to a number of water insoluble ectoparacitisides, which are particularly suitable for inclusion in the described formulation, but does not relate to the use of any nodulisporic acid derivatives.

Applicants respectfully submit that the solvent system in Baker's formulations comprises 88 to 98% of a fixed oil and 2 to 20% of a volatile silicone (page 2, lines 16-18 of EP 249409). Baker mentions dipropylene glycol monomethyl ether as a particularly suitable spreading agent, but does not teach or suggest that dipropylene glycol monomethyl ether can be used as a solvent. Furthermore, Baker teaches that "[t]he present formulations may contain up to 18% of additives conveniently used in pour-on formulations, for example, spreading agents, synergists, attractants, repellents, adhesion promoters, surface active agents, stabilizers and coloring agents" (see e.g., page 2, lines 28-34).

Applicants would like to point out, that pending claims do not relate to the use of fixed oil and volatile silicone as a solvent system, and that Transcutol (diethylene glycol monoethyl ether), the presently claimed liquid carrier vehicle, represents the remainder to 100% of the composition (see, for example, page 56 and examples 1 and 2 of the application as filed).

Accordingly, one skilled in the art would not be able to predict that Transcutol can be used as a vehicle in a spot-on formulation of a nodulisporic acid derivative based on the teachings of Baker.

Baker does not teach or suggest that the described formulation can be applied as a spot-on. Baker only relates to a pour-on formulation (see e.g., page 2, lines 16-18 and page 8, lines 1-13), where the applied volume is in the range of 2-60mL depending on the size of an animal.

The applied volume of the spot-on formulations of the pending claims can be of the order of about 0.3mL to about 1mL, preferably of the order of about 0.5mL, for cats and of the order of about 0.3 to about 5mL for dogs (see, for example, page 62 of the application as filed).

Applicants would like to note, that the disclosed spot-on formulation comprising at least one nodulisporic acid derivative exhibits high immediate efficacy and also long-lasting efficacy after being applied to the animal. Once deposited, the composition diffuses, in particular over the animal's entire body, and then dries without crystallizing or modifying the appearance or feel of the fur. The spot-on composition comprises a crystallization inhibitor which further promotes the absence of crystallization on the hairs and maintenance of the cosmetic appearance of the coat in such a manner, that the hair or fur does not become sticky despite the high concentration of the active materials. The active materials dissolve in the sebum, become concentrated in the sebaceous glands, from which they are gradually released over a long period. This is a well-known explanation of the long-lasting efficacy of the spot-on composition.

The claimed spot-on formulation was applied to dogs and cats infested with fleas, and its efficacy for thirty five days was measured (see Examples 3 and 4 of the application as filed). The data shown in the tables demonstrates that the claimed spot-on formulation retained its efficacy for the thirty five day period.

The claimed formulation comprising about 1 to about 40% (W/V) of at least one nodulisporic acid derivative; a pharmaceutically or veterinarily acceptable liquid carrier vehicle comprising a solvent and optionally a cosolvent, wherein the solvent is diethylene glycol monoethyl ether and the cosolvent is selected from the group consisting of absolute ethanol, isopropanol and methanol; and about 1 to about 20% (W/V) of a crystallization inhibitor system, provides effectiveness of long duration after the treatment of the animal.

The Examiner also alleges that applicant does not show that transcutol would have provided a result different from that obtained using another structurally similar carrier.

Neither Meinke *et al.* nor Baker demonstrates long lasting efficacy of the described formulation using solvents other than transcutol. Therefore, long lasting efficacy of the claimed

formulation can be attributed to the formulation excipients and their specific proportions in such formulation.

Neither Meinke *et al.* nor Baker, alone or in combination, teaches, suggests or motivates one skilled in the art to combine at least one nodulisporic acid derivative; a pharmaceutically or veterinarily acceptable liquid carrier vehicle comprising a solvent and optionally a cosolvent wherein the solvent is diethylene glycol monoethyl ether and the cosolvent is selected from the group consisting of absolute ethanol, isopropanol and methanol; and a crystallization inhibitor system to provide long term efficacy as exhibited by the spot-on formulation of the pending claims.

In view of the foregoing, one skilled in the art would not be motivated to add composition by Meinke *et al.* to Baker's pour-on formulation to obtain the formulation of the pending claims and predict the long-lasting efficacy of such formulation based on the cited references. Therefore, the references cited by the Examiner do not render the claimed subject matter obvious.

Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are respectfully requested.

III. THE NONSTATUTORY DOUBLE PATENTING REJECTION IS OVERCOME

Claim 1, 2, 6, 7, 14, and 17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over claims 1, 4 and 5 of copending U.S. Application No. 11/580,731, over claims 1, 8 and 9 of copending U.S. Application No. 12/119,150 and claims 1, 4 and 5 of copending U.S. Application No. 10/826,105 in view of Cleverly (U.S. Patent Application No. 10/222,559, Publication No. US (2004/0037869). The rejection is respectfully traversed.

Applicants reiterate that the issue of whether there is indeed double patenting is contingent upon whether the instant claims herewith are indeed considered and, if so, whether the Examiner believes there is overlap with the claims ultimately allowed in the instant application and U.S. Patent Application Nos. No. 11/580,731, 12/119,150 and 10/826,105 in view of Cleverly (U.S. Patent Application No. 10/222,559). If, upon agreement as to allowable subject matter, it is believed that there is still a double patenting issue, a Terminal Disclaimer as to the conflicting applications will be considered for the purposes of expediting prosecution.

Accordingly, reconsideration and withdrawal of the double patenting rejection, or at least holding it in abeyance until agreement is reached as to allowable subject matter, are respectfully requested.